PS120 Series
Fuel Strainer/Prefilters

From personal watercraft to agricultural equipment, the PS120 Series high-flow diesel or gasoline strainer/prefilter is designed to protect fuel pumps, carburetors, injectors, and related fuel system components. These innovative strainer/prefilters feature a heavy-duty die-cast aluminum mounting head, 4-port mounting versatility, a 200 to 260 micron cleanable nylon mesh screen, and a reusable clear water and sediment collection bowl.

The PS120 Series is ideal for equipment in environments with severe contamination and must be installed prior to, and in conjunction with, a Racor fuel filter/water separator. Strainers remove large droplets of free water and contaminants down to 200 micron. When used prior to engine fuel filter/water separator, extended filter life is realized.

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Product Features:

• 4-port aluminum mounting head with 3/8" or 1/2" NPTF threads
• Rugged construction
• Reusable collection bowl
• Easy to service and install
• 200 to 260 micron cleanable mesh screen filter
• Use on any gasoline or diesel application.
• Removes large droplets of water and sediment
• Saves time and money
• Extends filter life
• Use in land and marine applications
Installation Instructions

Exercise great caution when installing a PS120 Series strainer/prefilter to avoid a fire hazard. Do not smoke, allow open flame or excessive heat which could ignite a fire. Perform installation in a well ventilated area.

Refer to Mounting Information and Installation Diagram and install as follows:

1. Make sure engine is off and cool to touch.
2. Apply thread sealant to 1/2” or 3/8” NPTF fittings (do not use thread tapes as particles may break off and contribute to clogging filter).
3. Thread fittings into appropriate fuel ports and tighten snugly. Plug unused ports with port plugs and tighten snugly.
4. Mount strainer/prefilter vertically prior to fuel filter/water separator and in protected area away from heat sources. Maintain at least 3 in. (7.6 cm) of clearance below filter for servicing.
5. Attach fuel lines.

Note: Avoid tight bends and rubbing areas when routing hose.
6. Prime fuel system as instructed in engine manufacturers owner’s manual.
7. Start engine and check for leaks. Correct as necessary with engine off.

Mounting Information

Optional Fuel Transfer Pump
Do not exceed maximum PSI or flow rate of filter. Nor ideal—pumps emulsify water hindering filter performance.

Installation Diagram

Fuel Tank Above Filter
(Head pressure should not exceed max. PSI of filter.)

Fuel Tank
(Pressure Side Installation)

Install shut-off valve when fuel tank is higher than filter.

Fuel Tank
(Ideal Vacuum Side Installation)

To maintain prime, install check valve (with light or no restriction) when tank is lower than filter.

Fuel Tank
(Vacuum Side Installation)

Fuel Tank Below Filter
(Lift should not exceed 4 inHg.)

Maintain a service clearance below filter assembly of at least 3.0 (7.6 cm).
Service Instructions

Mesh screen cleaning/replacement frequency is determined by the contamination level in fuels. Fuel flow to engine becomes restricted as screen gradually plugs with contaminants, resulting in noticeable power loss and/or hard starting. As a guideline, clean screen every 500 hours, 10,000 miles, every other oil change, annually, or at first indication of power loss, whichever occurs first. Replace if mesh screen is damaged. Always carry extra replacement screens and fuel filters as one tankful of excessively dirty fuel can quickly plug a filter.

1. Make sure engine is off and cool to touch.
2. Close all fuel valves, if applicable, to make sure excess fuel does not spill during servicing.
3. With a collection pan in place, slowly remove clear bowl and mesh screen.
4. Clean screen with solvent and soft brush (or replace with new).
5. Lube bowl o-ring with motor oil or clean fuel.
6. Re-install mesh screen and clear bowl and tighten by hand only—do not use tools.
7. Open all fuel valves, if applicable.
8. Prime fuel system as instructed in engine manufacturers owner’s manual.

Replacement Parts

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. N/A</td>
<td>Mounting Head</td>
</tr>
<tr>
<td>2. RK51218-01</td>
<td>O-ring Kit</td>
</tr>
<tr>
<td>3. RK51219</td>
<td>Mesh Screen Filter Kit (200-260 micron) (includes # 2)</td>
</tr>
<tr>
<td>4. RK51220</td>
<td>Clear Bowl Kit (includes # 2)</td>
</tr>
</tbody>
</table>

Additional Parts (not shown)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>918-N8</td>
<td>PS120-01: 1/2” NPT Metal Port Plug Kit</td>
</tr>
<tr>
<td>22231</td>
<td>PS120-02: 3/8” NPT Metal Port Plug Kit</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Flow Rate</td>
<td>120 GPH (454 LPH)</td>
</tr>
<tr>
<td>Inlet/Outlet Port Size</td>
<td></td>
</tr>
<tr>
<td>PS120-01</td>
<td>1/2” NPTF</td>
</tr>
<tr>
<td>PS120-02</td>
<td>3/8” NPTF</td>
</tr>
<tr>
<td>Replacement Screen</td>
<td>RK51219</td>
</tr>
<tr>
<td>Micron Rating</td>
<td>200 to 260</td>
</tr>
<tr>
<td>Min. Service Clearance (below filter)</td>
<td>3.0 in. (7.6 cm)</td>
</tr>
<tr>
<td>Height</td>
<td>7.0 in. (17.8 cm)</td>
</tr>
<tr>
<td>Depth</td>
<td>3.1 in. (7.9 cm)</td>
</tr>
<tr>
<td>Width</td>
<td>4.0 in. (10.2 cm)</td>
</tr>
<tr>
<td>Weight (dry)</td>
<td>1.3 lb (0.59 kg)</td>
</tr>
<tr>
<td>Maximum Working Pressure¹</td>
<td>30 PSI (2.1 bar)</td>
</tr>
<tr>
<td>Water Removal Efficiency</td>
<td>None</td>
</tr>
<tr>
<td>Clean Pressure Drop</td>
<td>0.9 PSI (0.1 bar)</td>
</tr>
<tr>
<td>Ambient Temperature Range</td>
<td>-40° to +250°F (-40° to +121°C)</td>
</tr>
<tr>
<td>Maximum Fuel Temperature</td>
<td>190°F (88°C)</td>
</tr>
</tbody>
</table>

¹Pressure installations acceptable up to maximum PSI shown. Vacuum installations are recommended.
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